

# ELECTRICITY

## A customer's guide



southern electricity



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As an electricity customer, you rightly expect a reliable and efficient service from your electricity board. This guide aims to help you receive that service from Southern Electricity.

The guide explains:

- how electricity is priced
- how you can use it wisely to keep costs down
- how you can use one of the easier ways to pay
- how much electricity the different appliances use
- how you could make your home much more comfortable by good insulation
- how to recognise in people the signs of hypothermia (extreme cold) and how to treat the problem. Those at risk (and their friends and relations) can then make sure that they reduce the risk.

If customers think they will be unable to pay their bills in the near future, they should tell Southern Electricity quickly. Southern Electricity do not want to cut off their customers' supplies and they can take action to help customers who find themselves in this unfortunate position.



Electricity is supplied to you by Southern Electricity, your area electricity board, and a meter reader calls at your home regularly to record the amount of electricity you have used.

This is recorded in 'units' Each unit equals 1000 Watts of electricity used for one hour and is known as a kilowatt/hour (kWh). A unit, for example, is the amount of electricity used by one bar of an electric fire in one hour or a 100 Watt lamp in ten hours. This is explained in detail on page 9.



On the **Standard Domestic Tariff**, you pay the same price for all the electricity you use, plus a standing charge. The price and charge is among the information at the back of the booklet.

The alternative is the **Economy 7 Tariff** which has a special very low rate (less than half the price of the standard domestic tariff), for all electricity used during seven night hours. There is a day rate for all other electricity used, together with a slightly higher standing



You pay Southern Electricity for the electricity you have used. The bill is made up of a charge for each unit of electricity used, plus a quarterly standing charge which covers the cost of electricity board services such as linking customers' homes with the mains cable in the street, providing them with meters, reading the meters, sending out and processing bills, and other costs which apply equally to all customers.

There are two main tariffs available to domestic customers:





charge. Again, details can be found at the back of this booklet.

Households which use electricity overnight for heating and hot water can benefit from Economy 7.

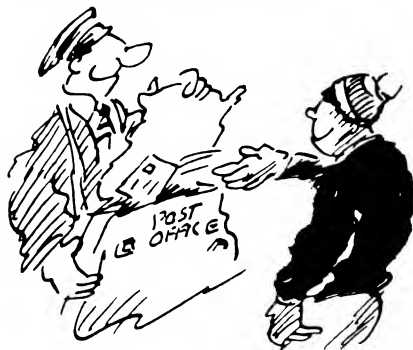
Electric storage heaters, for example, are designed for use on this tariff. Immersion heaters, too, can be time-switched to heat a cylinder of hot water overnight.

In addition, if you are on Economy 7, fridges and freezers operate at the low rate for seven out of 24 hours, and washing machines, tumble dryers and dishwashers can be timed to use it, too.

A family of four which has electric storage heating on Economy 7 saves more than £70 a year on its water heating if it is time-switched to use electricity mainly in the Economy 7 cheap period.

Electricity bills can be paid in a numbers of ways:

- At a Southern Electricity shop by cash or cheque.
- By post by sending a cheque or postal order (or cash by registered post) to the Southern Electricity address shown on the counterfoil of every bill.
- By bank giro.
- At a Post Office, although a charge will be made unless you have a National Girobank account.



There are a number of easy ways to pay:

- By a monthly 'budget account' through a bank or National Giro or payment at a Southern Electricity shop.
- By paying what you like, when you like towards the next bill, at a Southern Electricity shop.
- By paying with electricity savings

stamps available from Southern Electricity shops and other organisations authorised to sell them.

- By having a slot meter in your home.
- By a monthly bill.

You should consult Southern Electricity about the best scheme for you. Further details are included in the information at the back of the booklet.





## Electricity meters

If no one is at home when the meter reader calls, Southern Electricity will send you a bill for an 'estimated reading' based on previous readings or on a reading which you have given them. A bill based on an estimated reading will be corrected when the meter is next read.

Southern Electricity insist on reading meters at least once a year: special arrangements may have to be made for this.

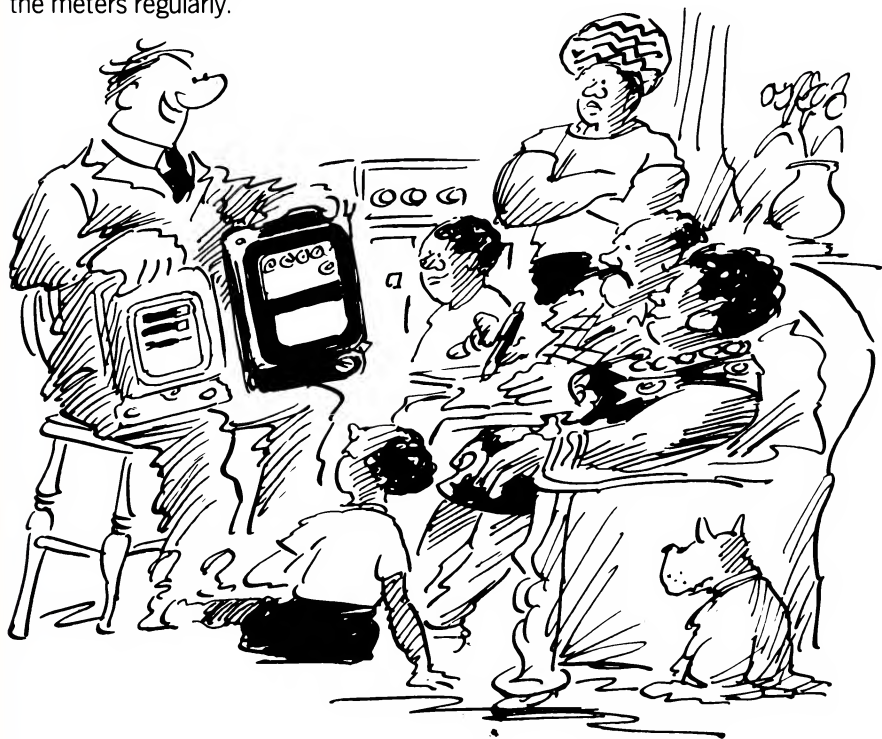
Because of the inconvenience this can cause, many new homes now have their meters in locked cupboards on an outside wall. Meter readers, who have keys for the cupboards, can then read the meters regularly.

Customers can have slot meters installed if it is safe and practical to do so. An extra quarterly charge is made for them.

Your electricity meter records the number of units (kilowatt hours) of electricity you have used. It is quite easy to read, and daily or weekly records are simple to keep.

You can be confident of the accuracy of your electricity meter. It is a precision instrument, checked before installation by independent meter examiners appointed by the Secretary of State for Energy.

There are basically two kinds of meter: the digital meter and the dial meter.

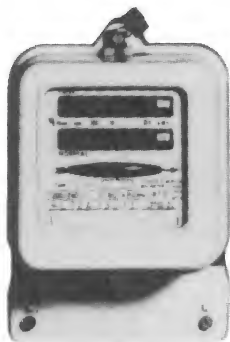




## Digital meters

These are the modern types of meter. The total number of units used is shown by a row of figures, like the mileage indicator on a car.

If the total number of units recorded exceeds 99,999 the meter starts again at 0.



To read a meter with one row of figures, write down the numbers from left to right. When you next read your meter, take away the old reading from the new. This gives the number of units used.

## Economy 7 meter

With the special Economy 7 meter or White Meter, there are two rows of figures: one for lower-priced night rate electricity in the top line (marked LOW)

and the other for the day rate (marked NORMAL). Read both rows of figures for the total number of night and day rate units used.

## Dial meter

Reading this type of meter is more complicated, but after a little practice you'll find it quite straightforward.

Write down the figures shown on the dials from left to right. If a pointer is between two figures write down the lower figure. Ignore the small red dial.



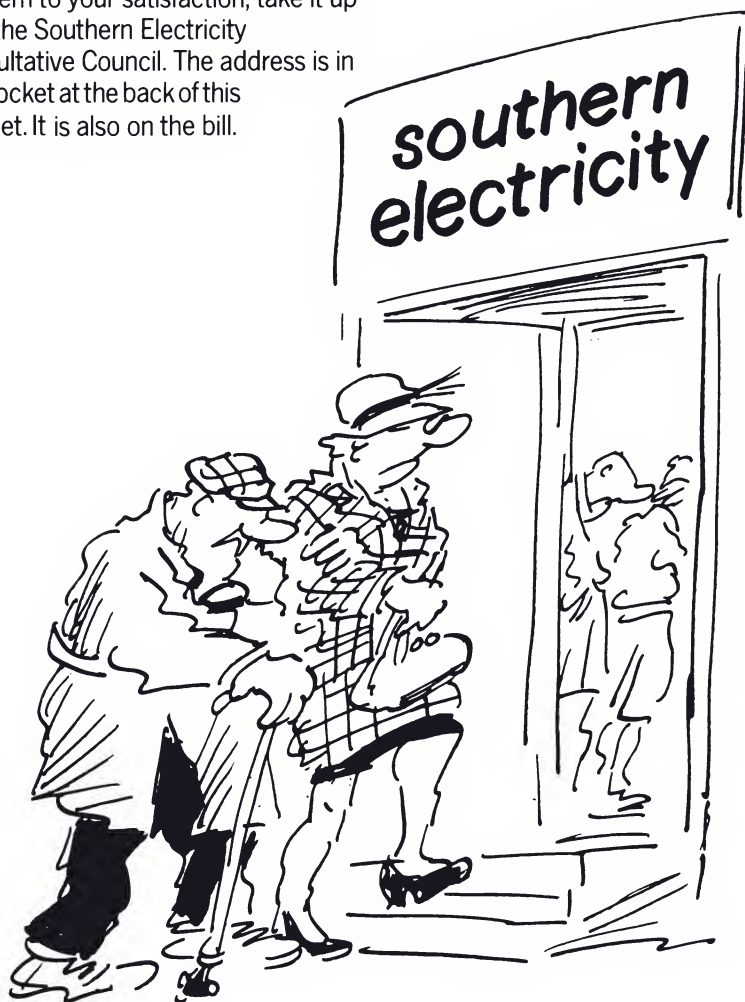
## Landlord's meter

If you pay for your electricity through a landlord's meter, remember that Southern Electricity will have fixed a maximum price for the resale of this electricity. Ask them for further details.

## Queries and complaints

If you have a query or complaint please speak first to your Southern Electricity shop or office. The address of the office serving you is on your electricity bill and the telephone number can be found in the telephone directory, under 'Electricity'.

If the local office can't deal with the problem to your satisfaction, take it up with the Southern Electricity Consultative Council. The address is in the pocket at the back of this booklet. It is also on the bill.



## How to get help if you can't pay your bill

Southern Electricity have no wish to cut off any of their customers. Before any disconnection takes place, they will consider every alternative. For example, they will offer the chance to pay off arrears in instalments.

Southern Electricity strongly advise any customers expecting difficulty in paying their bills to contact their local office as quickly as possible. They will be sympathetically heard.

Act fast, get advice now if you are finding it hard to meet the bill. This will make it much easier for you to be helped.

You can get advice on how to pay your bills and pay-as-you-go plans at Southern Electricity shops and offices. The staff there will also tell you how to

keep your costs down.

You can also get advice from the Southern Electricity Consultative Council (see the leaflet in the pocket at the back of the booklet), or from the Citizens' Advice Bureau or Consumer Advice Centre. But for advice on electricity bills go first to your Southern Electricity shop or office.

*Tell Southern Electricity* if you are getting any Supplementary Benefit or Unemployment Benefit or if all the people in the house are Retired Pensioners. And also contact your local Social Security Office. You may be entitled to a weekly 'heating addition' or lump sum payment to help you avoid disconnection. But they can only give you extra money when there are very special reasons.





*Tell Southern Electricity* if you are blind, severely ill or disabled and contact your Social Services Department for advice. Southern Electricity will try to agree with you a payment arrangement to avoid disconnection.

*Tell Southern Electricity* if you have children under 11 years old, or if you are getting Family Income Supplement. And also contact your local Council's Social Services Department who may be able to help avoid disconnection. They are unlikely to give you money but in some cases they may be able to help in other ways.

*Tell Southern Electricity* if you are going to contact Social Security or the Social Services. Your supply will not be cut off for 14 days or possibly longer if Social Security or Social Services are still looking at your case. Please keep in touch with Southern Electricity if your case takes longer to sort out.

Southern Electricity will not pry into your affairs; but they can help you only if you ask them to.

### **Your electricity supply will not be cut off . . .**

. . . if you agree and keep to a payment arrangement for your electricity and pay off the debt by instalments in a reasonable period. This arrangement would take account of what you tell Southern Electricity about your circumstances and income. You can make an offer of a payment arrangement or Southern Electricity can offer you one. Once an arrangement has been agreed, Southern Electricity will keep their side of the agreement; you must keep yours.

. . . if it is safe and practical to install a slot meter. This will be set to collect the debt in a reasonable period. This would take account of what you say about your circumstances and income.

. . . if all the people living in the house who have incomes are Retirement Pensioners, your supply will not be cut off between October 1st and March 31st. But this will not apply if they can pay but haven't, and in such cases the supply may not be restored for the following winter.

. . . if the debt is in the name of a past customer. But you must have made proper arrangements with Southern Electricity to take over the supply.

. . . if there is no adult at home at the time unless:

- you have been given a warning that you will be disconnected on or after a particular date
- Southern Electricity have got an entry warrant if they need to enter your home.



...if the debt is only for hire purchase.  
The supply can only be cut off if you are  
in debt for electricity.

Customers in these groups who may be facing difficulty in paying should contact their local office of the Department of Health and Social Security, or the Social Services Department of their local authority, which may be able to help. Southern Electricity and these welfare agencies also have arrangements for helping customers suffering hardship.

### **Your electricity supply will be cut off ...**

- if you do not pay your bill or keep to an agreed payment arrangement
- if Social Security or Social Services cannot help you.

However, if Southern Electricity does come to cut off your supply, tell them if your circumstances have changed. Your supply may be left on and your case looked at again.



## Security deposits

An area electricity board is required to supply electricity upon request, but it can ask for a cash deposit as security against future bills.

Security deposits will usually be required from short stay occupants or from previous bad payers. Security deposits will not normally be required where:

- a) a prepayment meter is installed;
- b) an acceptable credit reference is provided;
- c) the customer keeps to an agreed arrangement to pay each week or each month.

Electricity boards pay interest on the deposit to the customer. At the moment, this is at the rate of ten per cent a year. If there is disagreement on the amount to be provided as security, the board or the customer may apply for the matter to be decided independently. Deposits, and the interest earned, are refunded when

the customer ceases to take a supply from the board. Deposits may also be refunded at the customer's request after a period varying from one to two years, provided that the customer's record of payment has been satisfactory.





## When a wife – or husband – is deserted

The electricity board has the right to cut off supply if bills are not paid. If a deserted wife – or husband – who is not responsible for the payment of bills realises that money is owing, he or she should contact the board straight away, explain the situation and ask for the supply to be maintained.

The electricity board may be prepared to accept the deserted person as a new customer for the future and

take steps against the partner for unpaid bills. Proper arrangements must be made for a new person to take over the supply. The board may ask newly designated customers to pay off arrears by instalments for the period they have been there on their own before accepting them as new customers. The electricity board may also insist on a security deposit.





The board also has the legal right to enter premises which are, or have been, supplied with electricity. This is to enable the board to inspect wiring and other equipment which belongs to them, and also to read meters and disconnect the supply when this is authorised.

- Arrears of payment for electricity. There is no right to disconnect for non-payment of other accounts, for example, for work done or appliances bought.
- Failure to provide a security deposit after being properly required to do so.
- The installation is unsafe.
- Using electricity in such a way as to interfere with the supply to another person.



## Rights of entry

Before issuing a warrant authorising an electricity board to enter any building, a magistrate has to be satisfied that the electricity board is acting reasonably and that one of the following conditions applies:

- The board has failed to obtain entry after giving not less than 24 hours notice in writing of requiring to enter.
- Admission has been refused in a case of emergency.
- The premises are unoccupied.
- Application for admission would defeat the object of entry. For example, an occupier who has been disconnected by the board may be known to have restored his supply. Prior notice would give him the chance to remove the evidence.

The board has to leave the premises as secure against trespassers as before entry. It is also required to repair any damage caused by making entry, inspecting or removing the installation. The board naturally tries to keep such damage to a minimum.

In practice, a board's right of entry to a customer's premises is mainly used to disconnect the supply because an electricity bill has not been paid. It is important to remember that the interval between first sending the bill and applying for a magistrate's warrant would rarely be less than four weeks and is usually much longer.



## Tenants

If you receive a bill which is in your landlord's name and you pay him for your electricity, let Southern Electricity and the Southern Electricity Consultative Council know. Your supply will not be cut off for 14 days so as to give the Council time to help.

If you pay for your electricity through a landlord's meter, remember that Southern Electricity will have fixed a

maximum price for the resale of this electricity. Ask Southern Electricity for details.

Although boards have the power to fix a maximum charge, they have no powers to enforce it. People who are asked to pay more than the published maximum price are legally entitled to refuse. Alternatively, they can pay and take civil action in the courts to recover the extra.



## How to save on heating costs

Wise use of energy is the best way to reduce running costs in the home. Insulation makes the home warmer to live in and can enable you to run the heating at less cost, or save energy by switching it on later in the autumn and turning it off earlier in the spring.

Insulation helps make the home more comfortable, as well as saving on heating costs and enabling the householder to reduce the size of the heating system. In most homes, four inches (100 mm) of mineral fibre in the loft or roof space can reduce heat losses by about a fifth. Filling the cavity walls can improve these savings to over a third. Fitting draught excluder strips round the doors and window openings can save up to 1000 units in the colder months.

The only danger lies in getting over-enthusiastic and draught-proofing everything in an attempt to make the house airtight. Houses and people need

ventilation and to make a house airtight leads to condensation problems as well as personal discomfort. It is better to concentrate on draught-proofing windows and doors to the outside to reduce heat loss significantly.

Hot water cylinders must be properly insulated. Lagging it with three inches (80 mm) of mineral fibre, the minimum thickness of insulation recommended by the Government, reduces losses from 16p to 5p a day on the Economy 7 tariff, and from 27p to 8p a day on the standard tariff.

Double glazing is rarely justified on energy saving grounds alone. Thick or lined curtains will cut heat losses just as well when they are drawn during the evening.

Showers use less hot water than baths – and cost less. When you have a bath, do not fill it higher than you need.

### How to save when cooking

Match the pan and cooker ring sizes. Make full use of dual rings. Try cooking more than one vegetable in the same saucepan.



Pressure cookers can save electricity when used for complete meals.

It is cheaper to boil water in an electric kettle than a saucepan. Do not boil more water than you need; but always cover the kettle element with water.

Fill the oven to capacity whenever possible.

Try cooking a complete meal in the oven – a casserole or roast in one dish, vegetables in another and a baked sweet in a third. Potatoes baked in their jackets can fill up empty shelf space.

If you just want toast – it is more economical to use an electric toaster.

Small appliances like contact grills, slow cooking pots and multi-purpose cookers often use less electricity than full-size cookers.

### How to be energy-wise with the home laundry

Save up a full load in your washing machine or tumble dryer; but don't



overload the machine. Look for washing instructions on new garments.

Not everything has to be ironed.

Trust the thermostat on the iron and do not turn it up too high.

### How to save on lighting costs

Switch off lights when they are not needed; but do not overdo it and risk accidents on the stairs – or burglaries when the house is empty

Fluorescent lamps provide the same amount of light for about half the cost of using light bulbs. They are ideal for kitchens and they can be used in other rooms, too.

### How to save on fridges and freezers

Don't leave the fridge door open longer than you have to.

Defrost regularly.

Keep the freezer at least three-quarters full and make sure the door or lid shuts properly.

Never put hot food in a refrigerator or freezer. Let it cool first.

## How much electricity do appliances use?

The amount of electricity used by an appliance is measured in units. A unit is equal to 1000 Watts of electricity (one kilowatt) for one hour (kWh). The wattage of an appliance is marked on it. The higher the wattage, the more work it will do but the more it will cost to run per hour. For example:

- A 1000 watt appliance working for 1 hour will use 1 unit.
- A 100 watt appliance will work for 10 hours for 1 unit.

Many electrical appliances, such as irons, ovens and immersion heaters, have a thermostatic control fitted to ensure that once the set temperature is reached, the appliance will automatically switch off. It will come on again when the

temperature drops to below the required setting. This maintains the correct operating temperature of the appliances.

The following is only an approximate guide to running costs. The wattage of the appliance will vary from manufacturer to manufacturer and the way you use it will also affect the running cost.

### Blankets

*Single overblanket* (all night for 1 week – 2 units)

*Double overblanket* (all night for 1 week – 3 units)

*Single underblanket* 1½ hours each night for 1 week – less than 1 unit

*Double underblanket* 1½ hours each night for 1 week – less than 1½ units





## Cooker

One week's meals for a family of four – about 17 units

*Cooker hob* Bacon and egg breakfast for four – less than half a unit

*Radiant boiling ring* Chicken with lokshen – less than half a unit

*Conventional oven* 24 scones for 1 unit

*Fan oven* 48 meringues for 1 unit

*Cooker grill* 1 lb of pork sausages for less than half a unit

*Microwave cooker* 3 lb joint of beef – less than half a unit

4 chicken pieces for half a unit

*Multi-purpose cooker* Lamb chop casserole for four – half a unit

*Slow cooker* 8 hours' use – 1 unit

lamb dhansak for four – half a unit

## Dishwashers (cold fill)

One full load – 2 units

## Extractor fans

24 hours' operation – 1 unit

## Fluorescent strip lights (40 W)

About 20 hours' use – 1 unit

## Food mixers

More than 60 cake mixes – 1 unit

## Freezers (upright)

1 to 2 units a day

## Fridge/freezers

### (2 compressor type)

about 2 units a day

## Hair curling tongs (30 W)

60 half-hour curling sessions – 1 unit

## Hair dryer (500 W)

12 ten-minute hair drying sessions – 1 unit

## Hair rollers

More than 20 hair do's – 1 unit

## Heaters

*Slimline storage heaters* use Economy 7 low cost night rate electricity. Depending on the level of thermal insulation in the home, a 2 kW model uses an average of 45 to 75 units per week during the colder months. Larger models use proportionately more.

Electric fires give instant heat but they are expensive to use for all-day heating.

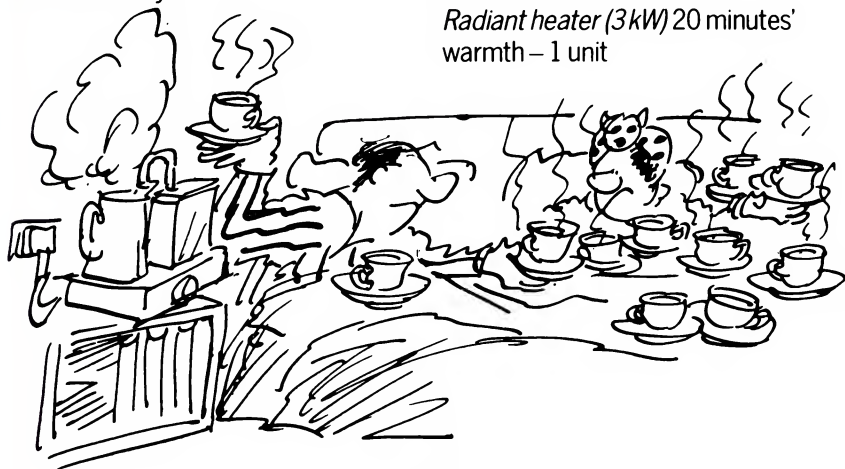
*Convactor heater (2 kW)* ½ hour's warmth – 1 unit

*Infra-red heater (1 kW)* 1 hour's warmth – 1 unit

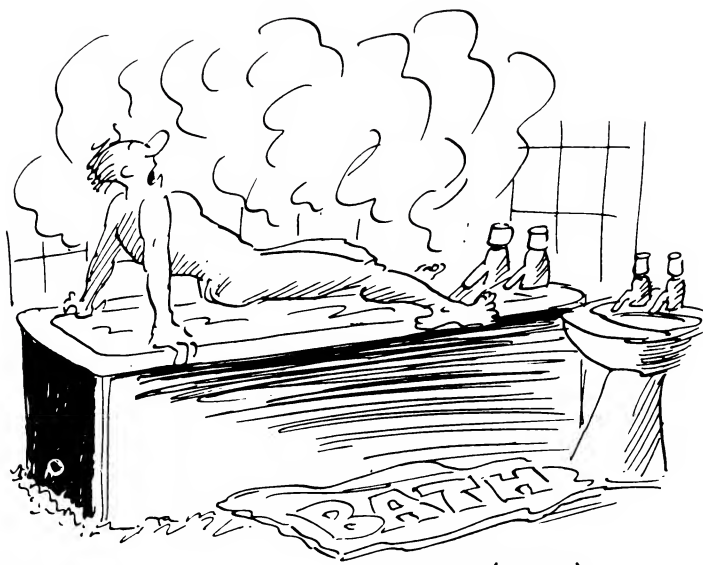
*Oil-filled radiator (500 W)* 2 hour's warmth – 1 unit

*Panel heater (1.5 kW)* 40 minutes' warmth – 1 unit

*Radiant heater (3 kW)* 20 minutes' warmth – 1 unit







### **Hot water**

Hot water for a family of four – about 67 units per week, using an Economy 7 factory insulated hot water cylinder. Using a 46-gallon cylinder and twin elements 90% of these units can be heated at the night rate on the Economy 7 tariff.

### **Instant water heaters**

More than 3 gallons of piping hot water – 1 unit

### **Irons**

More than 2 hours' use – 1 unit

### **Kettles**

12 pints of boiling water – 1 unit

### **Refrigerators (with frozen food storage)**

One day's operation – 1 unit

### **Spin dryers**

5 weeks' use – 1 unit

### **Stereo systems**

8-10 hours' listening – 1 unit

### **Tape recorders**

More than 24 hours' playing – 1 unit

### **Tea makers**

35 cups of tea – 1 unit

### **Television (colour)**

22-inch 6/9 hours' viewing – 1 unit

### **Television (black and white)**

20 hours' viewing – 1 unit

### **Toasters**

70 slices of toast – 1 unit

### **Towel rails (250 W)**

4 hours' operation – 1 unit

### **Tumble dryers**

30 minutes' drying – 1 unit.

Or 9 lb (4 kg) cotton garments and towels dried – less than 2½ units. 4½ lb (1.8-2 kg) synthetics dried – less than 1½ units

### **Vacuum cleaners (cylinder)**

1½ hours' use – 1 unit

### **Vacuum cleaners (upright)**

2 hours' cleaning – 1 unit

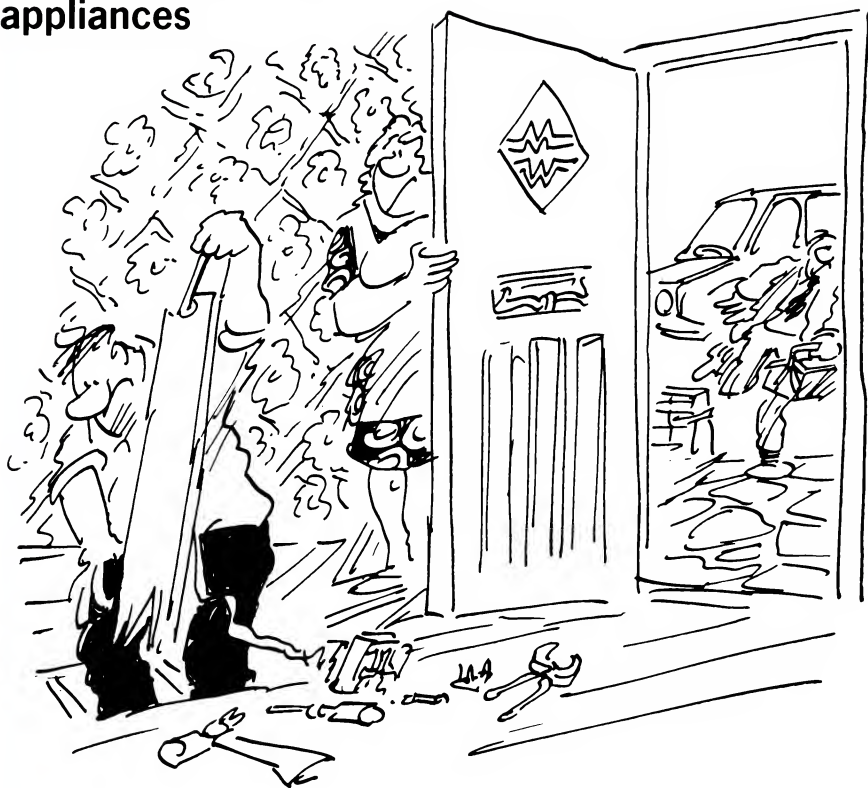
### **Washing machines (automatic)**

Weekly wash for family of four – 5 units.

Or 9 lb (4 kg) cottons (with pre-wash) washed at 90°C – 2½ units. 4 lb (1.8 kg) synthetics washed at 50°C – less than 1 unit

(Twin tub) weekly wash for family of four – 12 units

## Servicing electrical appliances



Electricity boards are leading electrical retailers, providing a nationwide after-sales service for domestic electrical appliances. To ensure that this service is of the highest quality, the boards keep to a code of practice which aims to offer service within three working days at a reasonable cost on appliances normally serviced by the board.

The boards have also made arrangements to carry enough spare parts to meet reasonable demands for

repairs within an acceptable period of time.

The code also states that, 'If the customer requests a visit to the house, an appointment should be offered, preferably on an am/pm basis.' If because of circumstances beyond the board's control, it is not possible for an appointment to be kept or a second visit is required, the customer should be given advance warning and a new appointment arranged.

# BEAB Approval

The letters BEAB stand for the British Electrotechnical Approvals Board. It is an independent organisation operating with government approval to provide protection from unsafe electrical goods.

A 'BEAB Approved' label indicates that the product has been type tested for compliance with the appropriate safety standards by an independent approval authority.



## Wiring in the home

Anyone living in a house more than 25 years old should have their wiring checked by a professional electrical contractor enrolled with the National Inspection Council for Electrical Installation Contracting. A list of approved contractors – which includes the electricity board – can be found in Southern Electricity shops or local reference libraries. Southern Electricity will carry out a free visual inspection and provide an estimate at no charge. The cost of a full inspection of home wiring depends on the size of the house.

### Consumer unit

In modern wiring systems, the entire electrical installation is controlled by a compact main switch and fuse box known as a 'consumer unit'.

A typical consumer unit has six fuses – 30 amp for the cooker, two 30 amp

fuses for socket outlets ring circuits, a 15 amp fuse for the hot water immersion heater, and two 5 amp fuses for upstairs and downstairs lighting circuits.

### Miniature circuit breakers

Some consumer units have miniature circuit breakers instead of fuses. These are automatic switches which disconnect the supply if there is a fault, short circuit or overload.

### Other types of main switch

Some older houses do not have consumer units. Instead, they have a separate main switch and fuse for each unit – one for the cooker, one for the lighting, one for the water heater and perhaps a main switch and fuseboard for the power sockets. If yours is like this, have it checked by a qualified electrician, it is likely to need attention.



## **Electricity in bathrooms**

In bathrooms, pull-cord switches must be used. Wall switches must be mounted outside the bathroom. No socket outlets are permitted in bathrooms, except special shaver sockets which protect the user from the mains.

## **Automatic timers**

Many households use automatic timers to switch on appliances such as washing machines, and tumble dryers to make the best of cheap night time electricity on the Economy 7 tariff.

Plug-in timers should never be used to switch on portable electric heaters. Even with wall mounted heaters, care should be taken to position them correctly because it is dangerous when furniture or curtains are left too close to a heater which is controlled by an automatic timer or thermostat.

The problem with plug-in timers applies equally to households with coin operated prepayment meters. Someone may put a coin in the meter, not knowing that curtains have been drawn across a heater when no electricity was available.

Storage heaters of course are perfectly safe and are designed to be switched from a time-switch provided with the meter. Do not cover a storage heater for reasons of your safety and its efficiency.

## **Sockets for appliances used out of doors or in garages**

Sockets to which appliances are connected for use outside the house, in gardens or garages, should be fitted with a small device called a residual current earth leakage circuit breaker (RCCB).

This is designed to protect the user of an electrical appliance by disconnecting it quickly if there is a fault.

## **Failure of electricity supply to the whole home**

If the electricity supply cuts out and all the lights go out, or if all the electrical appliances stop, first check that neighbours, too, have no electricity. Then phone Southern Electricity and tell them your supply is off, explaining whether it is just your house or your neighbours' as well. At night the street lights may indicate whether the whole of your road is without electricity. Give your name and address and the time the electricity failed.

If you live in a rural area, you may have an "earth leakage trip". Check whether it has tripped. If it has, reset it.

If it trips again, switch off all appliances except the lights. Then switch on the earth leakage trip and then the appliances, one at a time, until you locate the one which caused the trip to operate.

Arrange for that appliance to be checked by an approved contractor or repair organisation.

If the trip operates with only lights connected it is probable that the fault is in a lighting fitting. Switch off fluorescent lights and any lighting fittings having metal bodies. Then try again, having first switched on the earth leakage trip. Have the faulty fitting repaired.

Customers without earth leakage trips on their whole supply are unlikely to experience failure of all electricity to their home alone unless their main fuse has failed. This can only be replaced by the electricity board.

## Plugs and fuses

You can wire a plug or replace a fuse in it. You can also replace fuses – in the consumer unit (or the fuse board) by your electricity meter. But you must understand what you are doing. This section tells you how to do it.

Anything else should be left to Southern Electricity or an electrical contractor who is on the roll of the National Inspection Council for Electrical Installation Contracting (Southern Electricity shops have lists).

### Wiring plugs

Modern plugs are of the fused type with flat pins and are designed for use with 13 amp socket outlets on ring circuits (if you use round pin plugs in your home it is likely that your wiring is old and may need renewing – ask Southern Electricity for advice).

If the appliance you are attaching to a plug isn't new, first check the colours of the flex. A few years ago new colours came into use and it's important to know the changes to avoid wrong connections. The illustration below shows the old and new colour coding for flexes.

### Step-by-step guide to wiring a plug

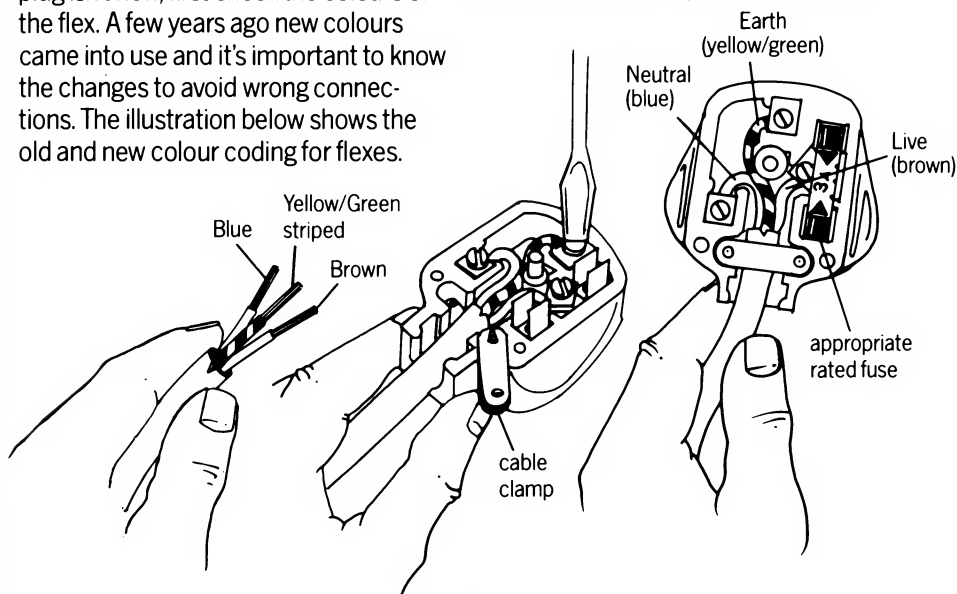
Wiring a plug is quite straightforward. All you need is a small screwdriver and something to cut the wires to length and to strip away unwanted insulation – a proper wire stripper and cutter is best.

Remember: green/yellow wire to Earth terminal (marked E or  $\perp$ ); blue wire to Neutral terminal (marked N); brown wire to Live terminal (marked L). Note that if the flex has only two wires, the Earth terminal in the plug is not used – the wires are connected to the Live and Neutral terminals only.

Unscrew plug top. Remove fuse (carefully lever with screwdriver if necessary). Loosen one flex clamp retaining screw; remove the other.

Carefully cut away 50mm (2 in) of flex outer sheath. Fasten sheath firmly under clamp. Cut wires to approximately 13mm ( $\frac{1}{2}$  in) beyond each terminal.

Carefully strip enough insulation to expose about 6mm (one quarter of an





inch) of wire for screw terminals, about 13mm (1/2 in) for clamp type ones.

Twist strands of each wire and fit into holes or loop clockwise round terminals. Check that there are no stray 'whiskers' of bare wire.

Tighten screws. Fit correct fuse. Check that wires are connected to correct terminals. Make sure all is secure. Refit cover.

Some appliances have a ready fitted plug of the non rewirable type. If this plug becomes damaged or faulty you should cut it off and get rid of it. Do not leave it where children may find it – they could plug it into a supply socket and hurt themselves.

### Main fuses

If a main fuse blows, first turn off the main switch. This may be on the consumer unit or on separate switch box nearby. Remove and examine the fuses in turn. Check

Fit new fuse wire as follows:

Loosen retaining screws and remove old wire. Wind new wire of the correct rating (number of amps) clockwise round one screw. Tighten screw.

Thread wire through fuse carrier to the other screw and wind it round clockwise, leaving a little slack. Tighten the screw and cut off surplus wire.

If a fuse continues to blow, send for an approved electrician – do not attempt to use a fuse of a higher rating.



cartridge fuses as described on page 30 or try a new fuse. With rewirable fuses look for wire breaks or scorch marks on the fuse carrier.



## Which fuse to fit?



### Main fuses.

Always fit fuses of the correct rating for the job. Never use a higher rated cartridge fuse or a thicker wire in a rewirable fuse, even as a temporary measure. Don't rely on the blown fuse as a guide, it may have been the wrong one in the first place. Note: Instead of fuses you may have miniature circuit breakers. Once the fault has been fixed, you simply press the button or switch on to restore power.

If power is not restored, send for an approved electrician.

Remember: Always switch off before changing fuses.

5 amp	Lighting circuit
15 amp/20 amp	Immersion heater
30 amp	Ring main circuit and average cooker
45 amp	Large cooker.

### Plug top fuses

3 amp. Most appliances up to 700 watts (look for the rating plate on the appliance, usually on the base or back). Check manufacturer's instructions.

13 amp. Appliances rated over 700 watts, also some appliances with motors – such as vacuum cleaners and spin dryers – (see manufacturer's instructions).



### Replacing fuses

A ring main circuit has two types of fuse as protection against overloading – a small cartridge fuse in each plug and a main fuse in the consumer unit or fuse board. A lighting circuit is protected by a main fuse only.

### Plug fuses

If an appliance stops working, switch it off immediately (turn off the appliance itself and at the socket outlet, if both have switches). Remove plug, unscrew top and take out fuse. Fit a new fuse or check existing fuse as described below, and replace if necessary. Also check the condition of the flex and connections for loose or disconnected wires. Refit plug cover. If the appliance still fails to work, and the main fuse is intact, get the appliance checked by an approved electrician.

### Checking fuses

Remove base of a metal cased torch. Place one end of fuse on bottom of battery and other end on torch casing. If bulb fails to light when the torch is switched on, the fuse has blown.



## Help for elderly and handicapped people

Many people with a slight disability can benefit from carefully chosen, everyday electric appliances.

Elderly people may leave a kettle boiling until the kitchen is filled with steam, sometimes because they are just forgetful. This would not happen if they had an electric kettle which switched off when it came to the boil.

Similarly a plug-in time-switch is a useful device to make sure that electric over blankets are switched on at the right time each night.

Slow cooking pots are simple to use.

Those with stiffening fingers and a weakening hand grip should know that most knobs on the larger electrical appliances, such as cookers and washing

machines, can be altered so that they can be turned easily.

Plugs are available with large handles which can be gripped easily.

Electric shower cabinets with fitted seats make bathing easier for people who find a bath, even one with hand grips, difficult to get in and out of.

Slot meters can be moved if they are out of reach. Sockets can be moved to a convenient height. Advice on all these things can be had from Southern Electricity.

For severely disabled people, there are electric seat lifts which move up the side of stairs and even lifts which can take an invalid chair from a ground floor room through the ceiling to a bedroom above. The local social services should be able to offer advice and perhaps help with these.



# Hypothermia



Hypothermia is a serious illness. The patient suffers from a very low, deep body temperature below 95°F (36°C).

Anyone who is in cold conditions may be at risk from hypothermia. Older people are especially vulnerable. As they become older and less active, they may not recognise a fall in temperature or, because of illness or disability, may be unable to take the necessary remedial action.

The early warning signs are:

- A general slowing down of speech, breathing, pulse, and responses
- Drowsiness
- Mental confusion
- Unsteady movement

- Body cold to touch
- Face puffy and pale
- Increasing disability as body temperature falls

## What to do if someone is suffering from hypothermia:

- Warm room up (but don't apply heat direct to the skin, for instance with a hot water bottle or electric blanket)
- Wrap up person well (but don't make bedcovers too heavy)
- Give warm drinks (but don't give alcohol)
- Keep warm in bed (discourage movement or exercise)
- **CALL DOCTOR – THIS IS ESSENTIAL**

## **Prevention is better than cure**

How can hypothermia be prevented?

- Keep out the cold by eliminating draughts and damp
- If necessary, live and sleep in one well-heated room
- Make sure regular meals and hot drinks are taken
- Ensure several light layers of clothing are worn
- Check that any necessary assistance is being received:
  - financial (Dial 100 and ask for 'Freephone Social Security')
  - home help
  - meals on wheels
- Make sure that friends visit regularly





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